Center for Demography and Ecology

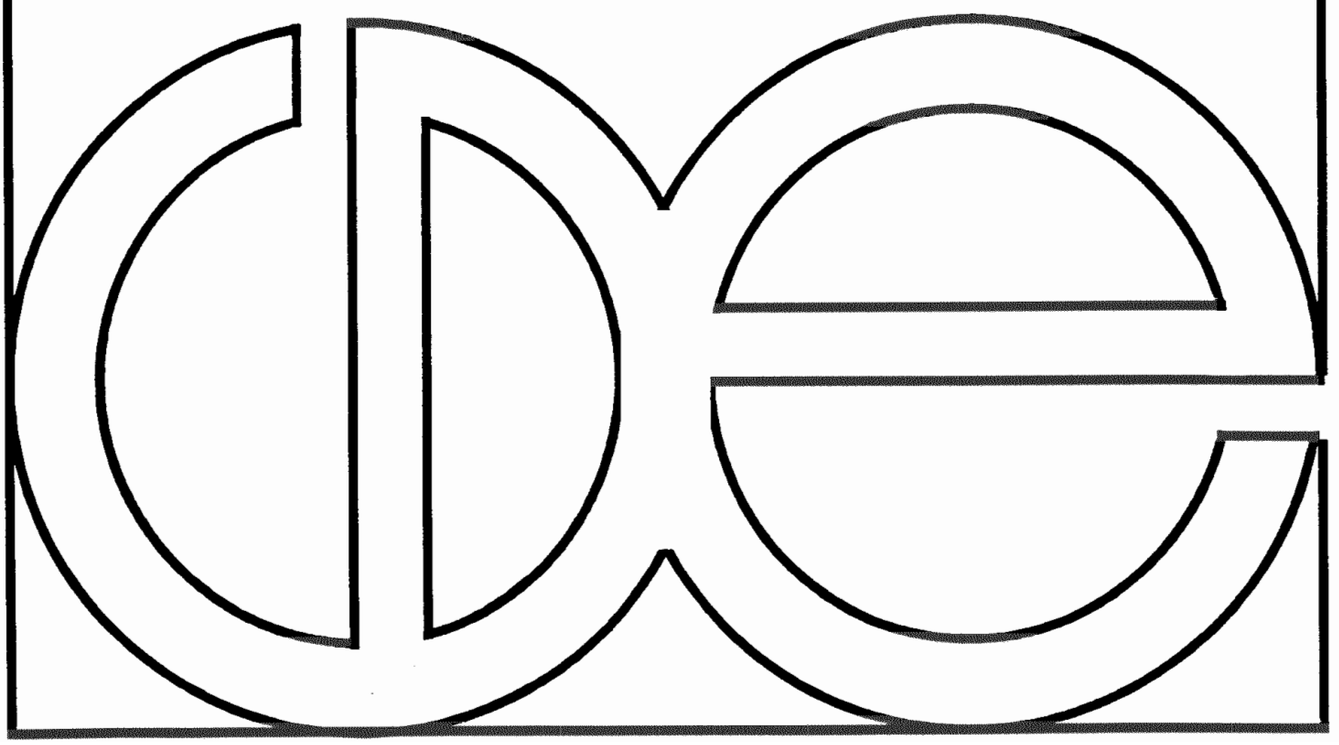
University of Wisconsin-Madison

Estimating Levels of Marital Disruption: Differential Data Quality by Source and Trends by Race, Age at Marriage, and Education

Larry L. Bumpass

R. Kelly Raley

CDE Working Paper 92-27



Estimating Levels of Marital Disruption: Differential Data Quality by Source and Trends by Race, Age at Marriage, and Education

Larry L. Bumpass
Center for Demography and Ecology
University of Wisconsin-Madison

R. Kelly Raley
Center for Demography and Ecology
University of Wisconsin-Madison

This is a revised version of a paper presented at the Southern Demographic Association meetings in Charleston SC, October 15-17, 1992. Research for this paper was supported by a grant (T32-HD 07014) from the Center for Population Research of the National Institute of Child Health and Human Development, using facilities receiving core support (#HD-06876).

Estimating Levels of Marital Disruption: Differential Data Quality by Source and Trends by Race, Age at Marriage, and Education

Previous research has shown that survey data on marital histories underestimate levels of divorce and remarriage (Preston and McDonald, 1979; Pendleton, McCarthy and Cherlin, 1983; McCarthy, Pendleton, and Cherlin, 1989). Preston and McDonald (1979) present data suggesting that divorce is underreported by around 25 percent in the census compared to vital statistics. McCarthy, Pendleton and Cherlin found a similar discrepancy between the June 1980 Current Population Survey (CPS) and vital statistics. Both of these studies noted that, despite the difference in level, trends in divorce calculated from surveys replicate those from vital statistics. Since the CPS offers more information about the respondent than vital statistics, these data are an important additional source for studying marital disruption.

While most analyses of marital disruption have ignored the implications of underreporting, this point was explicitly addressed in Castro Martin and Bumpass (1989) and Bumpass (1990)--leading to estimates of expected marital disruption for recent cohorts closer to 60 percent than to the common understanding of half. The present analysis is a continuation of our attempt to evaluate the quality of survey data on marital disruption and the resulting implications for demographic estimation.

We begin this analysis by examining trends in marital disruption over the last 45 years using data from four June Current Population Surveys, and show that data quality does not decay with time. For example, estimates for the 1970s from the 1990 CPS replicate those from the 1980 CPS despite the additional 10 years between the events and

replicate those from the 1980 CPS despite the additional 10 years between the events and measurement. Thus, we pool the June CPS's to increase our sample size and obtain more stable estimates of trends in divorce from 1945 to 1990.

Following this we compare period life-table estimates from the CPS data to published estimates from vital statistics (Weed, 1980) and find that estimates from survey data are much closer to vital statistics than we have previously thought. In fact, at lower marriage durations the probabilities of divorce estimated by the June 1980 and 1985 CPS almost exactly match the vital statistics estimates. We explore possible reasons why we reach such a different conclusion about survey bias than has been reported in prior work, and conclude that it most likely includes aspects of the standard used for the comparison.

Finally, we examine differences in trends in divorce by race, education and age at marriage and calculate current divorce probabilities for each of these subgroups.

Cumulative Probabilities of Separation for Marriage Cohorts

Estimates of marital disruption should be based on the date a couple stopped living together rather than the date of divorce, since variations in the timing (or even occurrence) of divorce after separation--reflecting legal and economic contexts--may distort estimates of levels and differentials (Bumpass and Sweet, 1972; Castro Martin and Bumpass, 1989).

Because marriage histories for men were not collected after 1980, we begin with a comparison for women over the four June CPS's for 1975, 1980, 1985 and 1990. Cumulative probabilities of separation by marriage duration were calculated from each survey separately. The results in Figure 1 reveal that estimated probabilities of divorce

within 5 years are remarkably similar for each marriage cohort across the surveys. The differences in the trend lines are greatest in the more recent period, and there is no evidence that divorces which occurred even 30 years ago are reported any less well in 1990 than in the year closest to when the divorce occurred.[1]

There is an important lesson in these comparisons with respect to the measurement issue raised above concerning treating date of separation (rather than divorce) as the appropriate marker of marital disruption. The 1975 CPS did not follow the current practice of asking separately for dates of separation and divorce; rather the question in 1975 was simply "When did this marriage end." It seems evident that many women report dates of separation rather than dates of divorce in response to this question, since the 1975 data do not fall consistently below the other surveys as we would expect if divorce dates were being reported.

We report the results of a more detailed exploration of this in Figure 2. For this comparison we have pooled the 1980-85 data. We compare the 1975 estimates to two alternative measures from 1980-85: one based on the date of separation and the other on the date of divorce. Since the 1975 line falls consistently between these two definitions, it seems clear that many women report separation dates rather than divorce dates when

---

[1] Bumpass, Castro Martin, and Sweet (1991) found that 40% of those married between 1970 and 1984 had separated and reconciled at least once, but that almost all of these separations that reconciled did so within a year. Thus, to avoid overestimating levels of marital disruption for marriage cohorts just prior to the survey date, we produce an estimate for the marriage cohort shifted back one year. For example, the estimates for the 1980-84 marriage cohort using 1985 data are actually estimates of marital disruption for the 1979-83 marriage cohort. This practice is continued in the estimates using pooled data.

asked when their marriage "ended," adding further support to our practice of using separation rather than divorce in measuring marital disruption.

Figure 3 compares the only two surveys we have for men. This figure includes a line for cumulative separation and for cumulative divorce to explore the measurement issue discussed above for women. First, comparing the 75 estimates based on dates in response to "when did your marriage end," we see that while the trend is closely replicated in these two surveys, estimates from the 1975 survey fall slightly below those from 1980 for all but one marriage cohort. This is the result we would expect if the reports on men were more likely to use date of divorce rather than separation in response to the question about when a marriage "ended." This interpretation seems strongly supported by the fact that the 75 data are almost identical to the 1980 estimates when divorce, instead of separation, is used to define disruption.

Since the CPS most often collects data on household members from women, men's marital histories usually are not self reported. Pendleton, McCarthy and Cherlin (1983) find that in the 1980 CPS, 70% of the data on men's marital histories is given by a proxy. In addition, marriage and divorce dates are more likely to be imputed for men. While imputation should produce random variation, proxy reports may bias reported levels of divorce. Marital separation may be underreported for men because proxies do not know of prior marriages or because they are more able to provide divorce than separation dates. Figure 4 compares the estimates for 1975 by gender. In this comparison, we see substantial underreporting of disruption for males, compared to females, for the period

preceding the survey, but quite remarkable agreement for earlier periods. This pattern would be most consistent with the explanation that marital data from males are of poorer quality because the living arrangements and lifestyles of separated and divorced males make them more difficult to locate and interview. Given that we have two surveys with potentially different measures of disruption for comparisons of male data, we will not further pursue issues relating to male reporting.

Given the close similarity of estimates across surveys, we have pooled the data for women from the June 1980, 1985 and 1990 surveys to provide more stable estimates of trends in marital disruption over marriage cohorts (shown in Table 1). We see in this table both the dramatic increase beginning in the late 1960s and the plateau of the 1980s. There is no indication of a decline in the late 1980s. Hence, reported levels of marital disruption for the 1980s imply that about one-fifth of first marriages are no longer intact within five years of marriage and that one-third have disrupted within 10 years.

Comparing Survey Data on Divorce to Vital Statistics

Because vital statistics obviously record the legal event of divorce rather than separation, we must use date of divorce to evaluate how well CPS data replicate rates based on vital statistics. Weed's (1980) period life-table estimates for 1975 provide the best available benchmark from vital statistics for this comparison. Using pooled 1980 and 1985 CPS data, we calculated period estimates for 1975 of the cumulative probability of divorce by successive marital durations, and the comparison of these to Weed's estimates from vital statistics is reported in Table 2. The CPS estimates in this are derived from the

experience during 1975 of the marriage cohorts of 1945 through 1975. Using life table techniques we calculated the probability of divorcing in the first year of marriage for those who married between July 1974 and June 1975, the probability of divorcing in the second year for those who married between July 1973 and June 1974, and so on. Our estimates are virtually identical to Weed's over the first 5 years of marital duration. After that, a slight difference emerges with the CPS estimates about 2 percentage points lower at 10 years and above. The cumulative proportions estimated from the CPS to have divorced by 30 years are only about 8% percent below the estimates from vital statistics.

To try to understand better why this estimate of underreporting is so much lower than previous ones, we reexamined the comparisons made by Preston and McDonald (1979). To compare against their numbers from the census, we use a pooled sample of the 1980 and 1985 CPS to provide estimates comparable to those of Preston and McDonald on the proportion of successive marital cohorts that had divorced by 1970; the results are in Table 3. This table is organized by marital duration in 1970, and it is important to note that this is not the same as the period life-table results in Table 2. Each row in Table 3 reflects the experience of an actual marriage cohort through all years leading up to 1970. As can also be seen in Figure 5, our estimates are closer to vital statistics than are Preston and McDonald's.[2] Indeed, as with the period estimate for 1975,

---

[2] The 1959 and 1960 marriage cohort is the exception to this statement. This data point may fall below the line because of a tendency to give a marriage year that ends in a zero, thus inflating the number of marriages in this year. However, an examination of the data shows that the numbers of marriages reported in 1960 are not especially large.

our estimates are very similar to those from vital statistics, fluctuating some across birth cohorts, and identical for cohorts as early as 11 years before 1970 (21 to 26 years before measurement in the 1980 and 1985 June CPS).

Hence, Table 3 and Figure 5 provide further evidence that retrospective reports of marital histories collected in the 1980s do not underreport divorce nearly as much as we have thought. One reason why our estimates are closer to those from vital statistics than Preston and McDonald's for the same time period may be that the stigma attached to divorce has decreased after 1970 as the accelerating experience of the late 1960s became more common knowledge. In their own work, Preston and McDonald note evidence of some reduction in the stigma of divorce beginning in the late 1960s.

It is less evident why our estimates of underreporting are lower than those of other earlier work, including our own (Castro Martin and Bumpass, 1989), that also used the CPS data. One lead is that the vital statistics figures in these earlier papers were based on official reports that drew the numerators from the vital statistics system and the denominators from census data. To the extent that failed marriages are likely to be underreported in the census, this would lead to an overestimate of divorce rates; however, the scale of error created by this factor would not be very large. It is likely that more of the difference reflects the difference between duration specific rates and cumulative proportions surviving. It is in the nature of life tables that a 20 percent underestimate of duration specific rates would lead to only about a 12 percent difference in cumulative experience by 30 years. We have previously compared the former, while our substantive

focus has been on the latter.

In sum, our estimates from pooled June CPS data are **very** close to Weed's vital statistics based estimates, and to the vital statistics based series of disruptions by 1970 provided by Preston and McCarthy. Underreporting of divorce in the CPS may be largely offset by the underreporting of marriages--with the result that the estimated rates of marital disruption are very good indeed. This is all the more remarkable given the levels of proxy reporting and imputation in the CPS.

Trends in Divorce by Race, Age at First Marriage, and Education

More work needs to be done on the evaluation of data quality over surveys for small subgroups. Our attempts at this have been severely limited by sample size, even with the CPS. Nonetheless, our work to date suggests that the trends we report below are not the result of within-survey decay in data quality with time since the event. Another potential problem with an analysis of sub-group trends in divorce is the high levels of imputation. The CPS replaces missing data with values supplied by looking back to the last respondent with similar characteristics. To the extent that divorce dates are assigned in this manner, these data may exaggerate differentials by race, age at marriage and education. Despite these problems, it is important that we can use the CPS data to examine differential trends because of the inadequacy of vital statistics data for this purpose: for example, of the marriages in the Marriage Registration Area, race is not reported for over one-third, and education is not reported for almost two-thirds.

Race. Table 4 and Figure 6 show trends in marital disruption within 5 years of

marriage for whites and blacks separately. Despite the marked divergence in marriage rates (Sweet and Bumpass, 1987; Bennett, Bloom, and Craig, 1989; Mare and Winship, 1991), the trends in marital disruption appear to have been similar--though more rapid increases among whites reduced the racial differential somewhat. For the 1945-49 marriage cohort, 7 percent of the white marriages had separated by five years compared to 14 percent of the black marriages. This 2:1 ratio had declined to about 3:2 (30 vs. 20 percent)[3] by the 1980-84 cohort.[4] Estimates for the late 1980s suggest a widening gap with substantial recent increases among blacks compared to rather stable rates among whites. Whether this is in fact the case will have to await further data, since this latest estimate for blacks is based on only about 400 marriages.

Age at First Marriage. It has been well documented that those who marry at earlier ages are more likely to divorce (Bumpass and Sweet, 1972; Castro Martin and Bumpass, 1989; Sweet and Bumpass, 1987), and as can be seen in Table 4 and Figure 7, this has become even more true recently. Similar to earlier findings (Morgan and Rindfuss, 1985), the "effect" of age at marriage has been due primarily to the higher disruption rates of teenage marriages compared to all others; and rates for teenagers have continued to increase while they have stabilized for women who married at ages 23 or

---

[3]Some of the difference may be due to higher levels of separation and reconciliation for blacks (or a greater jump in data decay in the first five years for blacks).

[4] Castro Martin and Bumpass (1989) report similar trends by race, but show the racial differential expanding sooner.

over. Marriages at ages 20-22, however, are starting to be distinguished by higher rates than those of older marriages. This point was noted by Castro Martin and Bumpass (1989), using period estimates for the five years before 1980 and 1985. As suggested in that analysis, it may well be that marriage in the early twenties has become increasingly non-normative as age at marriage has increased. What were once marriages at above the median age have now become among the earliest. If marriage is being delayed because of financial constraints faced by young people (Bennett, Bloom and Craig, 1991) or delayed role identification (Oppenheimer, 1988), those who now marry in their early 20s may be doing so under less propitious circumstances than marriages at these ages a decade ago. While it is possible that the most recent increase in this trend may simply reflect an increasing selectivity on low education among marriages at age 20-22, Castro Martin and Bumpass found this emerging difference in multivariate equations in which education was controlled.

Education. The trends by education in Figure 8 are the most striking. The plateau in the divorce rate of the last ten years has masked divergent patterns by education. Rates have been relatively stable for women with 1-3 years of college, but they have gone up for those with less education and down for college graduates. How might this have occurred? One distinct possibility is that the difficulties faced by young men over this last decade (Blackburn, Bloom and Freeman, 1990) were much more severe for the least educated, continuing a trend that might otherwise have abated for these groups as well. Unemployment and underemployment contribute greatly to marital stress and dissolution

(Bumpass, Castro Martin and Sweet, 1991). Another possible explanation is that as the population becomes more and more educated, those with the least education are increasingly selected on characteristics which predict marital failure. This leaves unexplained the plateau experienced by those who attended college, but these data suggest one reason why the aggregate trend has plateaued as much as it has. The shift in educational distributions has moved the composition of the population progressively to those educational levels with the lowest risk of divorce, and this has combined with the declines among the most educated.

Implications of Recent Levels of Disruption

Finally, we turn our attention in Table 6 to the implications of recent rates: the expected cumulative proportion of marriages that will have separated by successive 5-year durations if recent rates persist. The hypothetical nature of this statistical assumption must be underscored. The long-term increase in marital disruption of the last century (Preston and McDonald, 1979) could reverse. It seems more likely, however, that it may resume. We emphasize again (Bumpass, 1990) that there was a 15-year plateau in the long-term trend before the large increases of the late 1960s, and this could well be repeated.

We have selected 1988 as the basis of these estimates for two reasons. We have chosen not to include the year closest to survey because of the possible inflation due to temporary separations that may reconcile, virtually all of which will have done so after 12 months (Castro Martin and Bumpass, 1989). And we have selected as recent a year as possible to capture the emerging divergence observed on several variables, particularly

education.

In any event, we see in the first column of Table 6 that data from 1988 imply that by 30 years duration, 54 percent of recent marriages will have ended in separation or divorce. This lower level may reflect some real decline from the high of 1979. However, the major difference turns on the documentation in this analysis that earlier adjustments for about a 20 percent underreporting were in error. Nonetheless, it is somewhat disconcerting for the senior author to have traveled such a circuitous route through higher estimates, and the evaluations of the present paper, to return to the conventional wisdom. We only **seem** to be at the same place after this journey, however, since we now know that survey based estimates need little upward adjustment to account for underreporting; in addition to which trends over the late 1980s suggest that higher estimates of 60[5] percent may soon be derived directly from survey reports.

The remaining columns of Table 6 report these estimates of marital separation by race. Under the rates of 1988, over three-quarters of the marriages to black women and almost half of the marriages to white women will end in separation or divorce. Despite the later age at marriage of black women, differences by age at first marriage (shown in Table 7) are nearly as great as differences by race. Two-thirds of those marrying at age 20 or younger are likely to disrupt compared to a little over one-third among those marrying at ages 23-24. Although there is no difference between ages 23-24 and ages

---

[5] See Footnote 3.

over age 25 in disruption by 5 years duration, we note that a higher rate emerges for the older marriages over longer durations (Sweet and Bumpass, 1987). By 30 years duration, 41 percent of the latter will have disrupted compared to 33 percent of those married at ages 23-24.

As can be seen in Table 8, differences by education are of a similar order of magnitude, with 1988 rates implying marital dissolution for two-thirds of the least educated compared to about 36 percent of marriages to women with a college education.

Discussion and Conclusion

We began this analysis with a careful examination of data quality. First, we showed that survey data on divorce does not decay with time and that survey data underestimate divorce by perhaps 8 percent -- a much lower figure than reported by earlier comparisons of survey and vital statistics data. We also examined trends in divorce from 1945 to 1989 and differentials in trends by race, age at first marriage and education. Excepting the most recent marriage cohort, trends in divorce by race have been roughly parallel, with some convergence due to faster increases among whites. Trends by age at first marriage indicate that the probability of separation for those who marry at older ages did not increase during the 1980s, but that the chance of separation for marriages involving women age 22 or less have continued to rise.

Even more remarkable than the differences in trends by age at first marriage are differences by education. Women with less than a high school degree have higher probabilities of divorce in 1989 than in the 1970s, but the probability of divorce for

women with a college degree has declined over this time. As mentioned above, this may be due to increases in the income/employment disparity between the poorest section of society and the upper and middle classes. It may also be the result of increasing selectivity of the least educated.

Finally, we estimated levels of marital disruption implied by experience centering around 1988. On the basis of this experience, 50 percent of recent first marriages would be expected to separate in 30 years, though we note that this estimate seems to lie on an upward trend line. Differentials by race, age at first marriage and education are large and seem to be increasing. These differences point to an increasing divergence by race and class in family experience in the U.S. This is a particularly telling point in the context of rising rates of unmarried childbearing, experience that is heavily concentrated among blacks and less educated whites (Bumpass and Sweet, 1992).

References

Bennett, Neil, David Bloom, and Patricia Craig . 1989. "The Divergence of Black and White Marriage Patterns." American Journal of Sociology 95(November): 692-722.

Blackburn, McKinley L., David E. Bloom, and Richard Freeman. 1990. "The Declining Economic Position of Less Skilled American Men." in G. Burtless (ed.), A Future of Lousy Jobs? The Changing Structure of U.S. Wages. Washington D.C.: The Brookings Institute

Bumpass, Larry. 1990. "What's Happening to the Family? Interactions between Demographic and Institutional Change." (1990 Presidential Address to the Population Association of America) Demography 27(4):483-498.

Bumpass, Larry, Teresa Castro Martin, and James Sweet. 1991. "The Impact of Family Background and Early Marital Factors on Marital Disruption." Journal of Family Issues 12(1):22-42.

Bumpass, Larry and James Sweet. 1972. "Differentials in Marital Instability." American Sociological Review 37:754-755.

Bumpass, Larry and James Sweet. 1992. "Family Experience Across the Life Course: Differences by Cohort, Education, and Race/Ethnicity." Presented at the International Union for the Scientific Study of Population (IUSSP) "Peopling of America" Conference in Veracurz, Mexico, 1992.

Castro Martin, Teresa and Larry Bumpass. 1989. "Recent Trends and Differentials in Marital Disruption." Demography 25:37-51.

Cherlin, Andrew. 1979. "Work Life and Marital Dissolution." In G. Levinger and O. Moles Divorce and Separation: Context, Causes and Consequences. New York: Basic Books, pp. 51-166

Mare, Robert and Christopher Winship. 1991. "Socioeconomic Change and the Decline of Marriage for Blacks and Whites." In C. Jencks and P. Peterson (eds.) The Urban Underclass. Washington D.C.: The Brookings Institution.

McCarthy, James, Audrey Pendleton, and Andrew Cherlin. 1989. "The Quality of Marriage and Divorce Data from Surveys. Challenges. DHHS publication No. (PHS) 90-1214.

Morgan, S. Philip and Ronald R. Rindfuss. 1985. "Marital Disruption: Structural and Temporal Dimensions." American Journal of Sociology 90:1055-1077.

Oppenheimer, Valerie Kincade. 1988. A Theory of Marriage Timing. American Journal of Sociology 94(3):563-91.

Pendleton, Audrey, John McCarthy, and Andrew Cherlin. 1983. "Assessing the Quality of Retrospective Marriage Histories: The June 1980 Current Population Survey." Final Report, Contract 1-HD-12802, National Institute for Child Health and Human Development."

Preston, Samuel and John McDonald. 1979. "The Incidence of Divorce with Cohorts of American Marriages Contracted Since the Civil War." Demography 16(1):1-24.

Sweet, James and Larry Bumpass. 1987. American Families and Households. New York: Russell Sage.

Weed, James. 1980. "National Estimates of Marriage Dissolution and Survivorship." Vital and Health Statistics, Ser. 3, No. 19 IV, Washington, D.C.: U.S., Dept. of Health and Human Services. DHS Pub. No. (PHS) 81-1403.

Table 1. Pooled Data Estimates of Trends in Marital Failure: 1945-1989

Marriage Cohort	Proportion Separating Prior to 5th Anniversary	Proportion Separating Prior to 10th Anniversary
1945-49	7.6	10.9
1950-54	7.5	12.7
1955-59	8.8	15.2
1960-64	10.9	20.4
1965-69	15.3	26.9
1970-74	18.9	31.0
1975-79	21.1	33.4
1980-84	20.8	34.0
1985-89	22.1	

Source: Pooled sample of women respondents to the June 1980, 1985 and 1990 CPS

Table 2. Duration of Marriage Table for First Marriages with Divorce as the Only Form of Marital Disruption

End of Interval	Cumulative % Divorced by End of Interval	
	CPS 80/85 1975	Vital Stat 1975
1	2	1
2	5	4
3	9	8
4	12	13
5	15	16
6	19	20
7	22	23
8	23	26
9	26	28
10	28	30
15	34	38
20	39	43
25	42	46
30	44	48

Sources: Pooled sample of Women in the June 1980 and 85 CPS

Table 3. Comparison of Preston and McDonald's (1979) to CPS Estimates of the Probability of Marriages Ending in Divorce by 1970

Interval	Preston and McDonald		Current Population Survey	
	Census	Vital Stat	CPS 80/85	Unweighted N's
0	2	2	2	3014
1	2	3	4	2398
2	4	6	6	2098
3	7	9	9	1956
4	9	11	10	2057
5	10	13	13	1885
6	12	14	13	1880
7	13	16	15	1689
8	14	17	16	1731
9	15	18	13	1801
10	15	19	16	1747
11	16	20	20	1622
12	16	20	18	1639

Sources: Women respondents to the June 1980 and 1985 CPS, and Preston and McDonald (1979).

Table 4. Percentage of Marriages Separating Before 5th Anniversary, by Race and Age at First Marriage

Marriage Cohort	Race		Age at First Marriage			
	White	Black	<20	21,22	23,24	25+
45-49	6.8	13.8	10.5	5.3	4.1	4.8
50-54	6.6	14.4	10.0	3.9	5.0	4.2
55-59	8.3	15.8	11.0	5.1	6.2	5.7
60-64	10.4	15.4	14.1	6.4	6.2	5.6
65-69	14.6	23.3	19.1	10.7	10.0	9.7
70-74	18.4	26.2	23.5	14.0	12.8	12.3
75-79	20.8	29.3	27.6	15.8	15.3	14.4
80-84	20.4	29.9	28.7	18.8	13.7	15.2
85-89	21.3	34.4	32.5	20.5	16.9	15.9

Source: Pooled Sample of Women Respondents to the June 1980, 1985 and 1990 CPS

Table 5. Percentage of First Marriages Separating Before 5th Anniversary, by Education

Marriage Cohort	Education			
	< 12 Yrs	12 Yrs	13-15 Yrs	16+ Yrs
1945-49	10.2	6.4	8.0	3.4
1950-54	11.3	6.1	7.2	4.4
1955-59	12.4	7.8	9.2	5.2
1960-64	13.6	10.2	11.3	8.7
1965-69	19.2	15.0	15.7	12.2
1970-74	23.8	19.6	18.7	14.0
1975-79	27.9	23.0	19.9	12.8
1980-84	26.9	24.2	19.3	12.3
1985-89	29.0	25.8	23.0	11.6

Source: Pooled Sample of Women Resondents to the June 1980, 1985 and 1990 CPS

Table 6. Period Estimates of the Probability of Marital Separation in 1988

Interval	Cumulative % Separating		
	Total	White	Black
			3
5	21	19	29
10	32	29	48
15	39	36	56
20	44	41	64
25	48	45	70
30	50	46	75
1.08*30	54	49	81

Source: Women Respondents to the June 1985 and 1990 CPS

Estimates for blacks are for three-year marriage cohorts and refer to experience centering on June 1988.

Table 7. Adjusted Period Estimates of Marital Separation, by Age at First Marriage

Interval	Age at First Marriage			
	<20	21,22	23,24	25+
5	32	17	15	16
10	44	27	22	26
15	51	33	27	32
20	56	38	29	36
25	60	43	30	39
30	63	44	34	41

Source: Women Respondents to the June 1985 and 1990 CPS

Estimates are for three year marriage cohorts and refer to experience centering on June 1988.

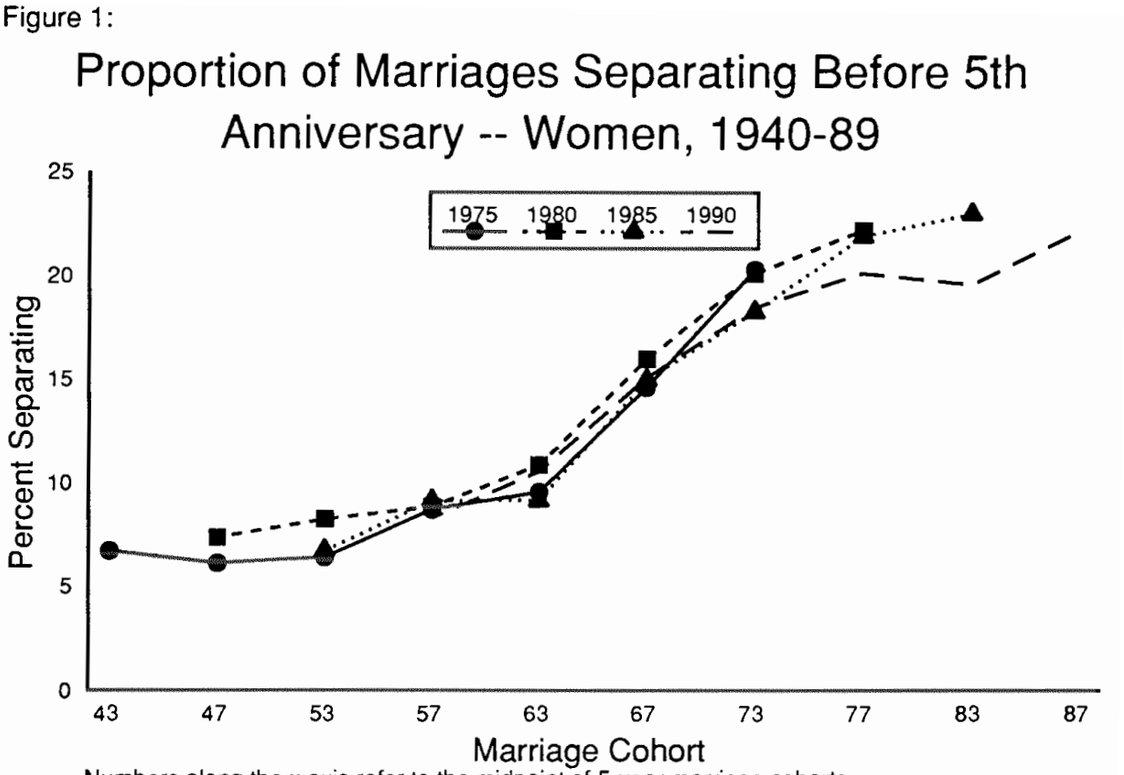
Table 8. Adjusted Period Estimates of Marital Separation, by Education

Interval	Education			
	< 12 Yrs	12 Yrs	13-15 Yrs	16+
5	28	25	20	11
10	42	38	30	20
15	49	44	37	25
20	56	49	44	28
25	60	53	47	32
30	63	55	50	36

Source: Women Respondents to the June 1985 and 1990 CPS

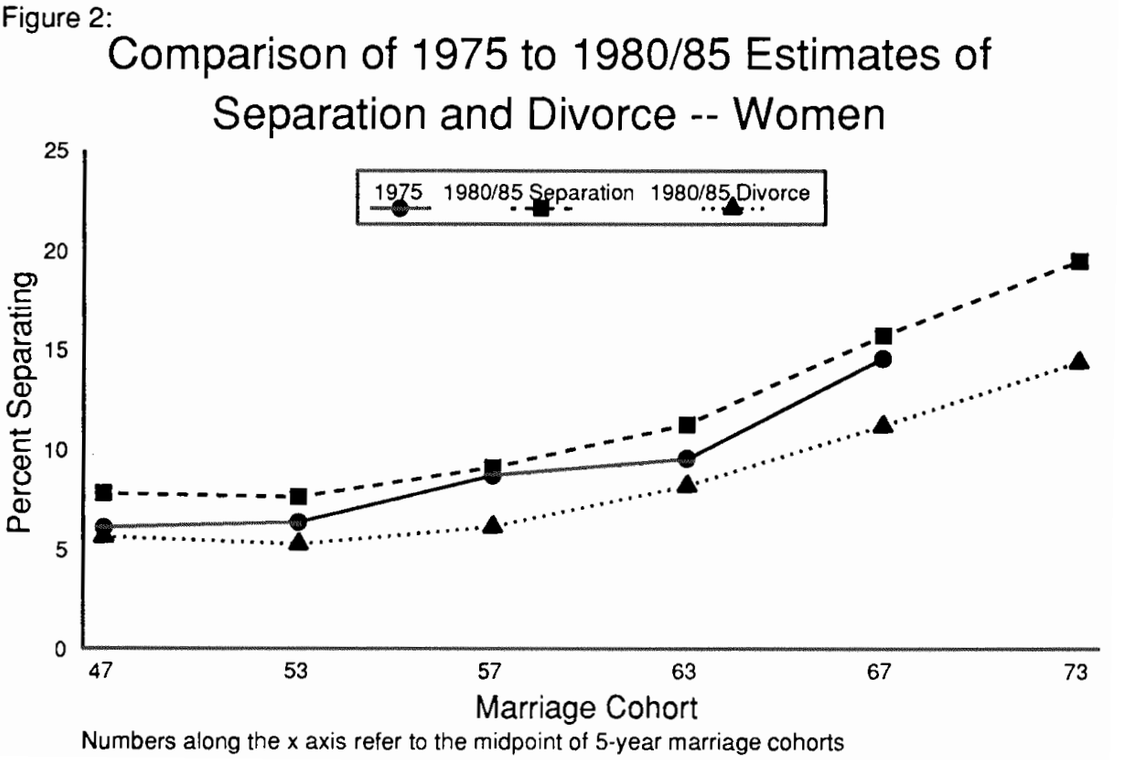
Estimates are for three-year marriage cohorts and refer to experience centering on June 1988.

Figure 1:



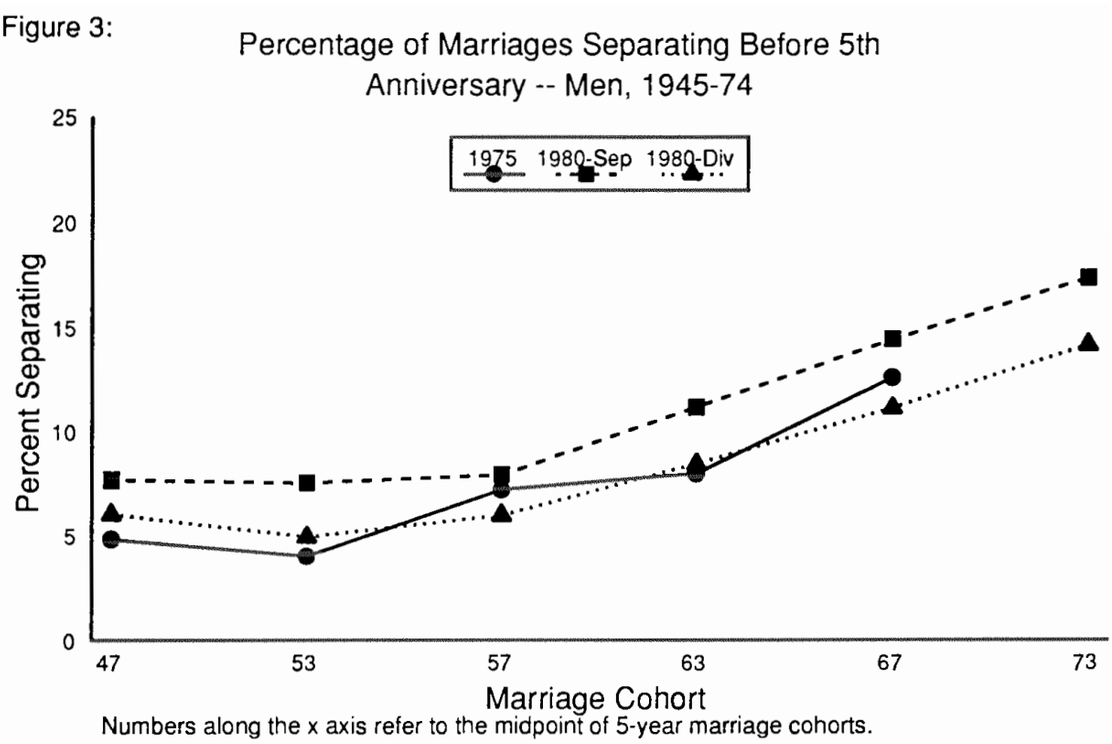
Numbers along the x axis refer to the midpoint of 5-year marriage cohorts
The marriage cohort just before the survey is offset by one year.

Figure 2:



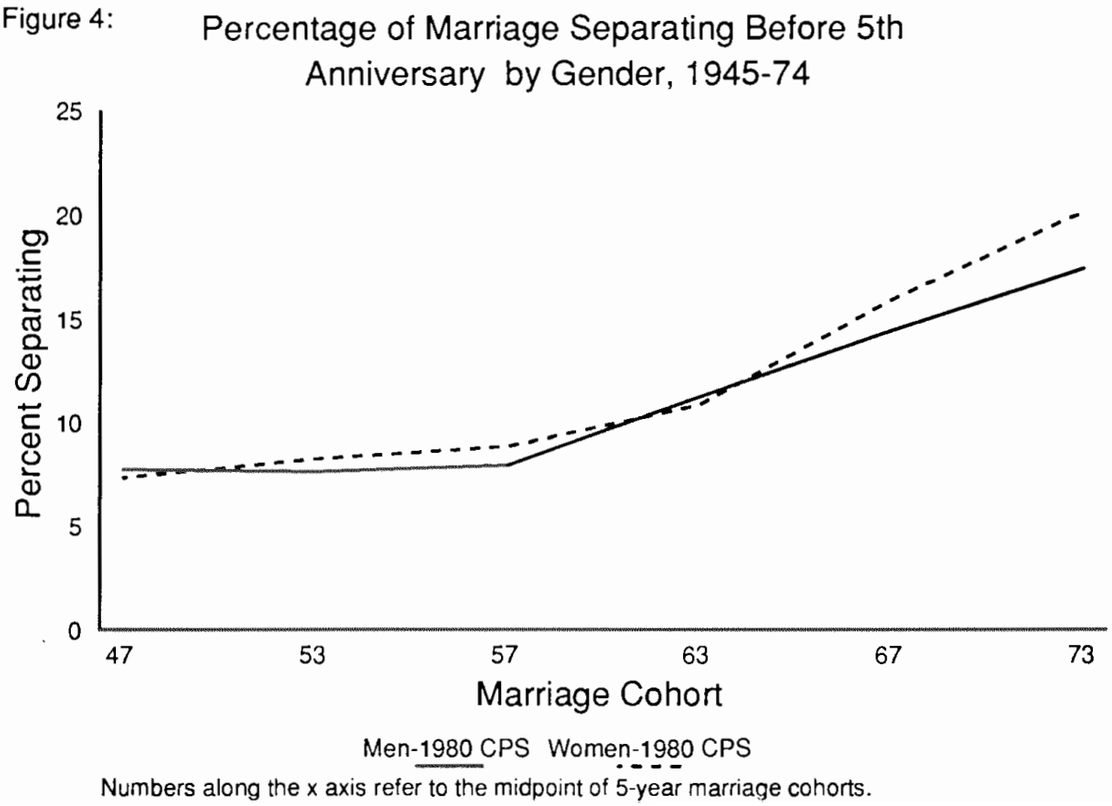
Numbers along the x axis refer to the midpoint of 5-year marriage cohorts

Figure 3:



Numbers along the x axis refer to the midpoint of 5-year marriage cohorts.

Figure 4:



Numbers along the x axis refer to the midpoint of 5-year marriage cohorts.

Figure 5:

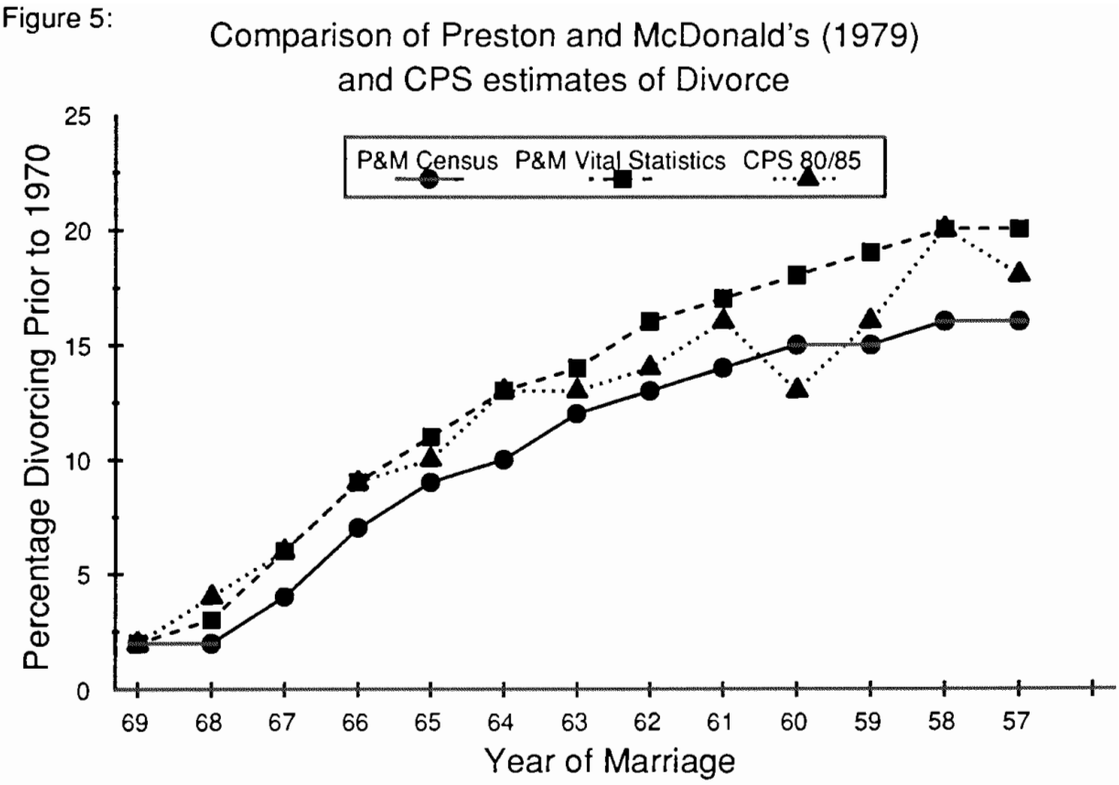
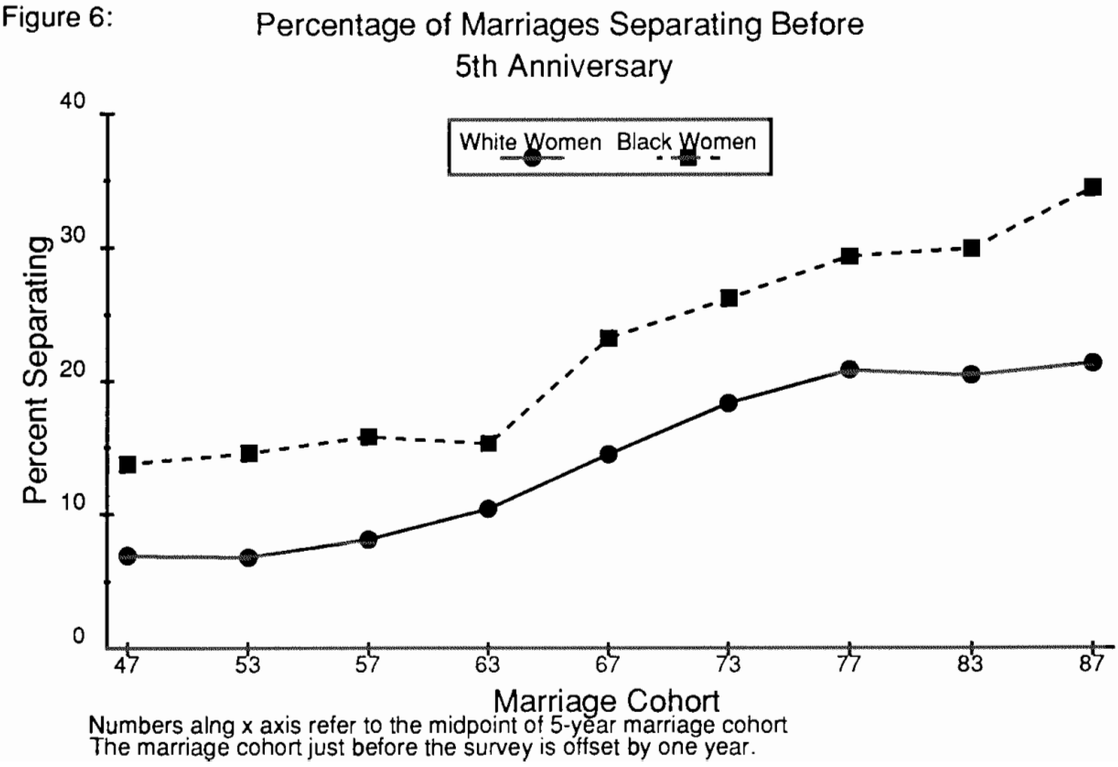
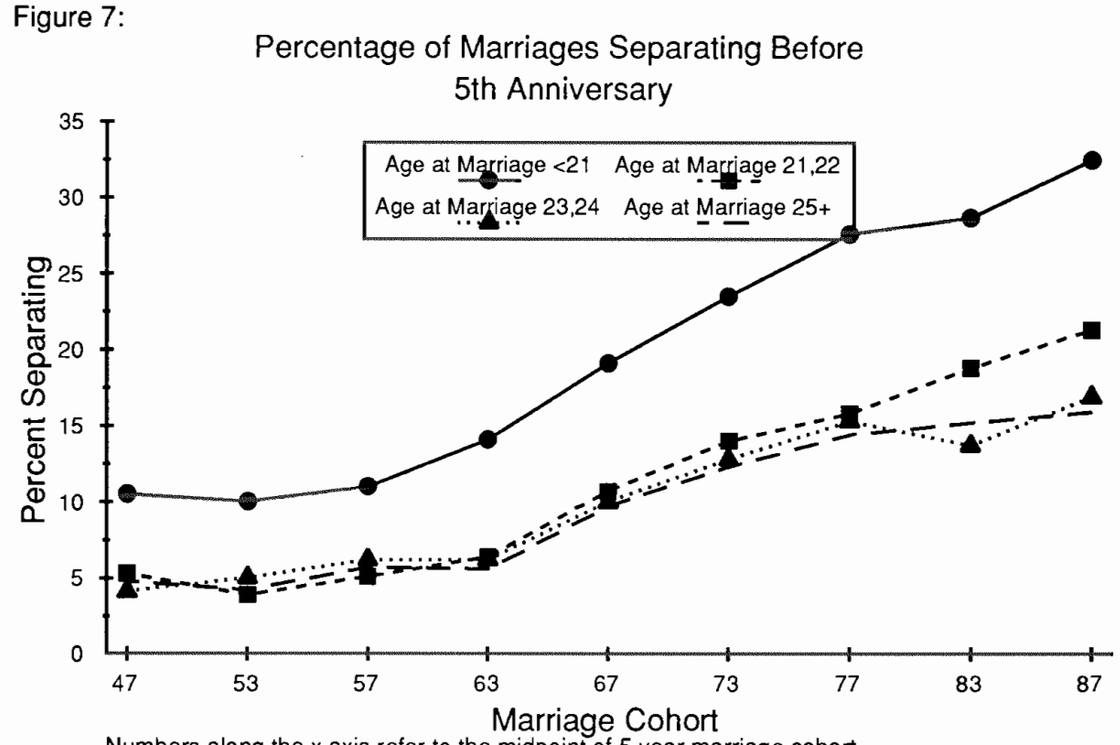


Figure 6:



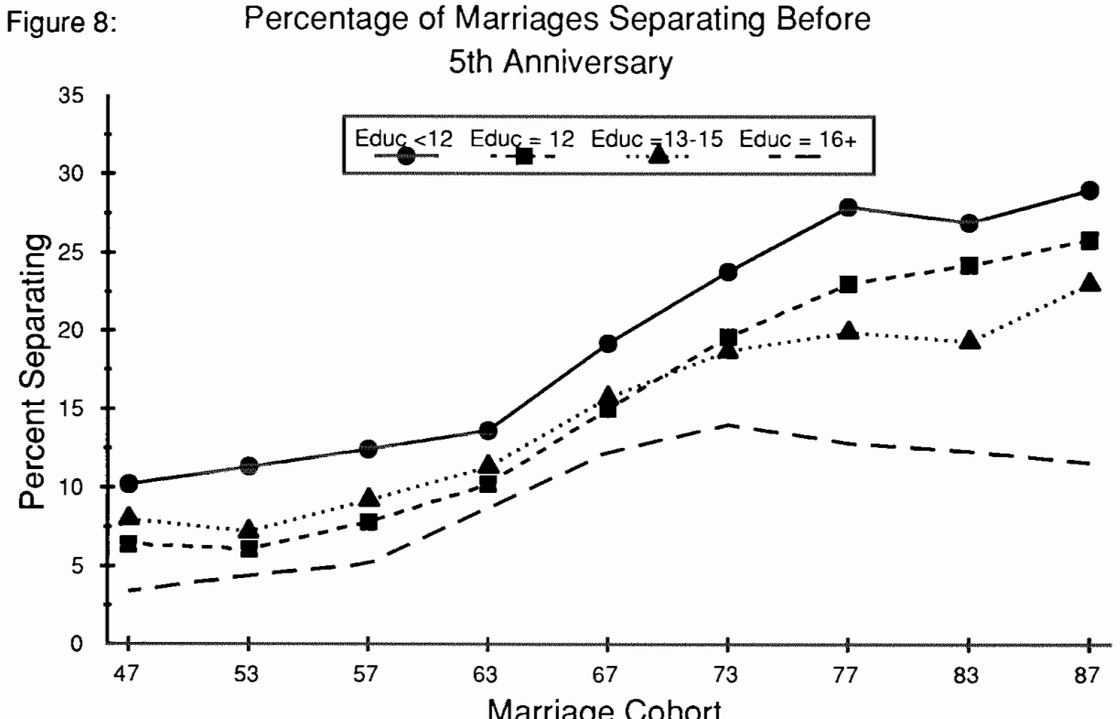
Numbers alng x axis refer to the midpoint of 5-year marriage cohort
The marriage cohort just before the survey is offset by one year.

Figure 7:



Numbers along the x axis refer to the midpoint of 5 year marriage cohort
The marriage cohort just before the survey is offset by one year.

Figure 8:



Numbers along the x axis refer to the midpoint of 5 year marriage cohort
The marriage cohort just before the survey is offset by one year.